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EXAMINER	
MURRAY, DANIEL C	
ART UNIT	PAPER NUMBER
2443	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/629,682	KOOPS ET AL.	
	Examiner	Art Unit	
	DANIEL C. MURRAY	2443	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 JUL 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2 and 5-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2 and 5-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 21JUL2010 has been entered.

2. **Claims 21 and 22** have been added by Applicant.

Claim Objections

3. **Claim 21** is objected to under 37 CFR 1.75 as being a substantial duplicate of **claim 20.** When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k). A network of ATM switches as recited in **claim 20** and a service implemented such that it is composed of equipment that is ATM switches as in **claim 21** amounts to the same thing.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. **Claims 1,2, and 5-22** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. **Claims 2 and 5-22** are rejected by virtue of their dependence on **claim 1.**

Regarding **claim 1,** claim elements "means for acquiring, inferring, and transmitting" are a means (or step) plus function limitation that invokes 35 U.S.C. 112, sixth paragraph. However, the written description fails to disclose the corresponding structure, material, or acts for the claimed function. It is unclear whether the claim limitation is modified by sufficient structure for performing the claimed function or it is unclear whether the corresponding structure is sufficiently disclosed in the written description of the specification.

Applicant is required to:

(a) Amend the claim so that the claim limitation will no longer be a means (or step) plus function limitation under 35 U.S.C. 112, sixth paragraph; or

(b) Amend the written description of the specification such that it expressly recites what structure, material, or acts perform the claimed function without introducing any new matter (35 U.S.C. 132(a)).

If applicant is of the opinion that the written description of the specification already implicitly or inherently discloses the corresponding structure, material, or acts so that one of ordinary skill in the art would recognize what structure, material, or acts perform the claimed function, applicant is required to clarify the record by either:

(a) Amending the written description of the specification such that it expressly recites the corresponding structure, material, or acts for performing the claimed function and clearly links or associates the structure, material, or acts to the claimed function, without introducing any new matter (35 U.S.C. 132(a)); or

(b) Stating on the record what the corresponding structure, material, or acts, which are implicitly or inherently set forth in the written description of the specification, perform the claimed function. For more information, see 37 CFR 1.75(d) and MPEP §§ 608.01(o) and 2181.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made

in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. **Claims 1, 2, 5-10, 13, 18, 19, and 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Moyer et al. (US Patent # US 6,766,364 B2)** in view of **McGuire (US Patent Publication # US 2002/0161888 A1).**

a) Consider **claim 1,** Moyer et al. clearly show and disclose, a network management system for creating and implementing a service on a network (abstract), said network management system comprising: means for acquiring policy rules comprising service rules 220 (service template) which create the service and implementation rules 220 (service template) which implement the service (the service template of Moyer performs both the functions of the service rules and implementation rules)(abstract, column 2 lines 23-46, column 3 lines 50-67, column 4 lines 1-26); wherein said implementation rules 220 (service template) for implementing the service comprise technology rules 222 (device template) and equipment rules 222 (device template)(the device template of Moyer performs the function of both the technology rules and equipment rules)(abstract, column 2 lines 23-46, column 3 lines 57-67, column 4 lines 1-4, column 5 lines 10-40), wherein the inferring means (derives) correlates the service rules 220 (service template) with the technology rules 222 (device template)(column 3 lines 57-67, column 4 lines 1-4 lines 58-64), wherein the technology rules 222 (device template) determine technology to use in the implementation of the service based on attributes of the service and equipment in the network (abstract, column 2 lines 23-47, column 3 lines 50-67, column 4 lines 1-26), and wherein the service is defined by the service rules 220 (service template) independently of the technology and specification of the network equipment (abstract, column 2 lines 23-28, column 3 lines 57-62), where the inferring means adapts the technology rules 222 (device template) using the equipment rules 222 (device template) based on an equipment type

(Moyer; abstract, column 2 lines 23-46, column 3 lines 57-67, column 4 lines 1-5, column 5 lines 10-40). However, Moyer et al. does not specifically disclose means for transmitting the determined commands to network elements of the network; and means for inferring said policy rules to determine said commands corresponding to said policy rules.

McGuire shows and discloses deployment and management of devices that control the transmission of data over a network, such as switches, routers, firewalls, load balancers, and the like, and more particularly to a system and method that provides for automated deployment and management of a variety of different types of such network devices, wherein McGuire discloses means for transmitting the determined commands to network elements of the network (abstract, paragraph [0008], [0009], [0043], [0044]); means for inferring said policy rules to determine said commands corresponding to said policy rules (abstract, paragraph [0008], [0009], [0043], [0044]).

One of ordinary skill in the art at the time the invention was made would have been motivated to combine the teachings of McGuire and Moyer et al. since both concern the provisioning, configuration, and management or network services and devices and as such, both are with in the same environment.

Therefore, it would have been obvious to one of ordinary skill in the art that the time the invention was made to incorporate determining and applying commands necessary to enable a device, as taught by, McGuire into the system of Moyer et al. for the purpose of automating a provisioning and management system (McGuire; abstract), thereby minimizing or eliminating the need to manually configure devices.

b) Consider **claim 2,** and **as applied to claim 1 above,** Moyer et al. as modified by McGuire clearly show and disclose, the network management system claimed in claim 1, wherein said inference means comprises an inference engine provided in the network management system

and external to the network comprising the network elements (Moyer; figure 2, figure 5, column 3 lines 25-37, column 6 lines 60-64).

c) Consider **claim 5,** and **as applied to claim 1 above,** Moyer et al. as modified by McGuire et al. clearly show and disclose, the network management system claimed in claim 1, wherein the service rules specify conditions and timing for creating the service (abstract, column 2 lines 42-47, column 3 lines 57-62). However, Moyer et al. as modified by McGuire et al. does not specifically disclose the service rules are provided externally from the network management system.

Nonetheless, it would have been obvious to one of ordinary skill in the art at the time the invention was made that a database contain data used by a system, in this case service rules, could be implemented either internally (e.g. at the same sight or on the same machine) or externally (e.g. remotely either of site or on the same site but in a different machine than that housing the main system) from the system.

d) Consider **claim 6,** and **as applied to claim 1 above,** Moyer et al. as modified by McGuire et al. clearly show and disclose, the network management system claimed in claim 1, wherein the technology rules specify which protocol to use for the service based on the attributes of the equipment in the network and wherein the equipment rules model how to select the technology rules based on the attributes of the equipment (Moyer; column 3 lines 57-67, column 4 lines 1-26).

e) Consider **claim 7,** and **as applied to claim 1 above,** Moyer et al. as modified by McGuire et al. clearly show and disclose, the network management system claimed in claim 1, wherein the service is designed by a developer independently from specifications of equipment and technology specified in the implementation rules and wherein the implementation rules are dynamically implemented after the determining means determines applicable implementation rules (Moyer; column 2 lines 23-47, column 57-65, column 4 lines 6-26).

f) Consider **claim 8,** and **as applied to claim 1 above,** Moyer et al. as modified by McGuire et al. clearly show and disclose, the network management system claimed in claim 1, wherein the service is rules designed by an operator without requiring specific knowledge of equipment and technology of the network for the service (Moyer; abstract, column 1 lines 55-63).

g) Consider **claim 9,** and **as applied to claim 1 above,** Moyer et al. as modified by McGuire et al. clearly show and disclose, the network management system claimed in claim 1, wherein the implementation rules specify implementation specific details of the service (Moyer; column 3 lines 57-65, column 4 lines 6-26).

h) Consider **claim 10,** and **as applied to claim 1 above,** Moyer et al. as modified by McGuire et al. clearly show and disclose, the network management system claimed in claim l, wherein the implementation rules specify attributes of the service (Moyer; column 3 lines 57-65, column 4 lines 6-26).

i) Consider **claim 13,** and **as applied to claim 1 above,** Moyer et al. as modified by McGuire et al. clearly show and disclose, the network management system claimed in claim 1, wherein the equipment rules model how the technology rules must be selected for a particular equipment type (Moyer; abstract, column 3 lines 65-67, column 4 lines 1-2).

j) Consider **claim 18,** and **as applied to claim 1 above,** Moyer et al. as modified by McGuire et al. clearly show and disclose, the network management system claimed in claim 1, wherein the equipment is a router (Moyer; figure 1, column 1 lines 15-37).

k) Consider **claim 19,** and **as applied to claim 1 above,** Moyer et al. as modified by McGuire et al. clearly show and disclose, the network management system claimed in claim 1, wherein the network comprises IP routers (Moyer; figure 1, column 1 lines 15-37).

l) Consider **claim 22,** and **as applied to claim 1 above,** the network management system claimed in claim 1, wherein the particular equipment type is selected based on a manufacturer (Moyer; abstract, column 2 lines 39-47, column 3 lines 57-67, column 4 lines 1-4).

10. **Claims 11, 16, 17, 20, and 21** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Moyer et al. (US Patent # US 6,766,364 B2)** in view of **McGuire (US Patent Publication # US 2002/0161888 A1)** in further view of **Newton, Harry (Newton's Telecom Dictionary).**

a) Consider **claim 11,** and **as applied to claim 1 above,** Moyer et al. as modified by McGuire et al. clearly show and disclose, the network management system claimed in claim 1, wherein the service is a virtual private network. However, Moyer et al. as modified by McGuire et al. does not specifically disclose the service is a virtual private network.

Newton shows and discloses that a virtual private network is a service that can be implemented on a network (Newton, definition of VPN (virtual private network) page 982-983).

Therefore, it would have been obvious to one of ordinary skill in the art that the time the invention was made to incorporate the teachings of Newton into the system of Moyer et al. as modified by McGuire et al. for the purpose of creating a service on a public network with the characteristics of a private network.

b) Consider **claim 16,** and **as applied to claim 1 above,** Moyer et al. as modified by McGuire et al. clearly show and disclose, the network management system claimed in claim 1, wherein the technology is Internet Protocol Security (IPsec) protocol. However, Moyer et al. as modified by McGuire et al. does not specifically disclose the technology is IPsec protocol.

Newton shows and discloses that the technology IPsec protocol can be implemented on a network (Newton, definition of IPsec (Internet Protocol Security) page 501).

Therefore, it would have been obvious to one of ordinary skill in the art that the time the invention was made to incorporate the teachings of Newton into the system of Moyer et al. as modified by McGuire et al. for the purpose of creating a secure service on a public network.

c) Consider **claim 17,** and **as applied to claim 1 above,** Moyer et al. as modified by McGuire et al. clearly show and disclose, the network management system claimed in claim 1, wherein the technology is multi-protocol label switching (MPLS) tunnels. However, Moyer et al. as modified by McGuire et al. does not specifically disclose the technology is multi-protocol label switching (MPLS) tunnels.

Newton shows and discloses that the technology multi-protocol label switching (MPLS) tunnels can be implemented on a network (Newton, definition of MPLS (multi-protocol label switching) page 604).

Therefore, it would have been obvious to one of ordinary skill in the art that the time the invention was made to incorporate the teachings of Newton into the system of Moyer et al. as modified by McGuire et al. for the purpose of making forwarding decisions on a network.

d) Consider **claim 20,** and **as applied to claim 1 above,** Moyer et al. as modified by McGuire et al. clearly show and disclose, the network management system claimed in claim 1, wherein the network comprises asynchronous transfer mode (ATM) switches. However, Moyer et al. as modified by McGuire et al. does not specifically disclose the network comprises asynchronous transfer mode (ATM) switches.

Newton shows and discloses that the network comprises asynchronous transfer mode (ATM) switches. (Newton, definition of ATM switch page 124).

Therefore, it would have been obvious to one of ordinary skill in the art that the time the invention was made to incorporate the teachings of Newton into the system of Moyer et al. as modified by McGuire et al. for the purpose of implementing a network using ATM switches.

e) Consider **claim 21,** and **as applied to claim 1 above,** Moyer et al. as modified by McGuire et al. clearly show and disclose, the network management system claimed in claim 1, wherein the equipment is an asynchronous transfer mode (ATM) switch. However, Moyer et al. as modified by McGuire et al. does not specifically disclose the equipment is an asynchronous transfer mode (ATM) switch.

Newton shows and discloses that the network comprises asynchronous transfer mode (ATM) switches. (Newton, definition of ATM switch page 124).

Therefore, it would have been obvious to one of ordinary skill in the art that the time the invention was made to incorporate the teachings of Newton into the system of Moyer et al. as modified by McGuire et al. for the purpose of implementing a network using ATM switches.

11. **Claim 12** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Moyer et al. (US Patent # US 6,766,364 B2)** in view of **McGuire (US Patent Publication # US 2002/0161888 A1)** in further view of **Ballantine et al. (US Patent # US 6,446,123 B1).**

a) Consider **claim 12,** and **as applied to claim 1 above** Moyer et al. as modified by McGuire et al. clearly show and disclose, the network management system claimed in claim 1. However, Moyer et al. as modified by McGuire et al. does not specifically disclose the technology to be used is determined based on a number of sites involved in a particular network.

Ballantine et al. show and disclose monitoring network performance, traffic, inventory, breakdown, repair activity, and other conditions, alerts a user to anticipated problems based upon

projection of performance and related data, wherein the technology to be used is determined based on a number of sites involved in a particular network (abstract, column 5 lines 35-62).

Therefore, it would have been obvious to one of ordinary skill in the art that the time the invention was made to incorporate determining the technology to use based on network information (i.e. network inventory), as taught by, Ballantine et al. into the system of Moyer et al. as modified by McGuire et al. for the purpose of planning based on network information (Ballantine; column 5 lines 35-44).

12. **Claim 14** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Moyer et al. (US Patent # US 6,766,364 B2)** in view of **McGuire (US Patent Publication # US 2002/0161888 A1)** in further view of **Abaye et al. (US Patent # US 7,024,475 B1).**

a) Consider **claim 14,** and **as applied to claim 1 above,** Moyer et al. as modified by McGuire et al. clearly show and disclose, the network management system claimed in claim 1. However, Moyer et al. as modified by McGuire et al. does not specifically disclose the particular equipment type is selected based on their capacity.

Abaye et al. show and disclose performance modeling of a communications system, such as one that provides for communications of streaming data, wherein the particular equipment type is selected based on their capacity (column 1 lines 64-67, column 2 lines 1-10).

Therefore, it would have been obvious to one of ordinary skill in the art that the time the invention was made to incorporate selection of equipment based on their capacity, as taught by, Abaye et al. into the system of Moyer et al. as modified by McGuire et al. for the purpose of proper network planning when deploying a communications systems (Abaye; column 1 lines 64-67, column 2 lines 1-10).

13. **Claim 15** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Moyer et al. (US Patent # US 6,766,364 B2)** in view of **McGuire (US Patent Publication # US 2002/0161888 A1)** in further view of **Westfall et al. (US Patent # US 6,449,650 B1).**

a) Consider **claim 15,** and **as applied to claim 1 above,** Moyer et al. as modified by McGuire et al. clearly show and disclose, the network management system claimed in claim 1, wherein the service provides video conferences. However, Moyer et al. as modified by McGuire et al. does not specifically disclose wherein the service provides video conferences.

Westfall et al. show and disclose network policy management system and methods define service templates. The service templates contain information on the topologies of services such as video calls, web services, order processing applications, or the like, wherein the service provides video conferences (abstract, column 7 lines 45-58).

One of ordinary skill in the art at the time the invention was made would have been motivated to combine the teachings of Westfall et al. and Moyer et al. as modified by McGuire et al. since both concern configuring networks to provide services and as such, both are with in the same environment.

Therefore, it would have been obvious to one of ordinary skill in the art that the time the invention was made to incorporate implementing video conferencing services, as taught by, Westfall et al. into the system of Moyer et al. as modified by McGuire et al. for the purpose of providing video conferencing services (Westfall; column 7 lines 45-58), thereby allowing users to establish a vide conference.

Response to Arguments

14. Applicant's arguments filed 21JUL2010 have been fully considered but they are not persuasive.

Applicant argues that Moyer does not teach or suggest "…the inferring means adapts the technology rules using the equipment rules based on an equipment type."

The Examiner respectfully disagrees; Moyer clearly discloses the inferring means adapts the technology rules using the equipment rules based on an equipment type (Moyer; abstract, column 2 lines 23-46, column 3 lines 57-67, column 4 lines 1-5, column 5 lines 10-40). Moyer clearly discloses upon receiving a request to configure a specific service, our inventive system obtains a service template, from a plurality of service templates that corresponds to the requested service. Service templates provide vendor-neutral end-to-end requirements for enabling a particular service within a customer premise network. The system uses the obtained service template to invoke a configuration generator that generates vendor-neutral device-configuration settings for the device types that can comprise a network. The system next invokes a configuration validator module to validate the network for the requested service. For example, the configuration validator determines if the generated vendor-neutral device-configuration settings for the requested service and the device-configuration settings for all priorly enabled services within a network meet the service requirements, as specified by the service templates, for the services enabled within the network. Finally, the system invokes an adaptor module that translates the vendor-neutral device-configuration settings determined for the requested service to vendor-specific device-configuration settings and communicates these settings to the particular devices within the customer premise network to enable the service. Similar to the above, the network configuration manager can also

disable a service within the customer premise network (Moyer; column 2 lines 23-46, particularly lines 39-46).

The customer premise network database 202 maintains entries for all users serviced by the network configuration manager 200 and specifically, maintains a list of the devices 104-112 within a given customer premise network, the corresponding configurations of these devices (e.g., IP addresses), and a list of the services installed and running in this network. The service database 204 maintains a list of the available services the network configuration manager is capable of configuring and a list of corresponding service templates 220. Service templates provide vendor neutral end-to-end requirements for enabling a particular service within a customer premise network. For example, a service template can provide the NAT port forwarding requirements and firewall requirements for a particular service (e.g., the port numbers and protocols used by the service). The device database 206 maintains device templates 222 for vendor specific devices. A device template provides the capabilities of a particular device and how to configure that particular device. The network configuration directory 208 maintains all vendor-neutral device-configuration settings for all services priorly enabled in a given customer premise network 100.

As such, for each service requested by a user, the configuration manager 218 invokes the configuration generator 210 to generate, from a corresponding service template, vendor-neutral device-configuration settings for the device types that can comprise a network (column 4 lines (Moyer; column 3 lines 57-67, column 4 lines 1-5). Moyer clearly discloses service configuration validator (inferring means) adapting the device template (i.e. configuration of a particular device)(technology rules using the equipment rules) basted on a particular device type (equipment type) (i.e. a device template provides the capabilities of a particular device and how to configure that particular device).

Therefore, Moyer clearly discloses that the inferring means adapts the technology rules using the equipment rules based on an equipment type.

Applicant argues that Moyer's "service template 220 does not correspond to the claimed implementation rules and device template 222 does not correspond to both the claimed technology rules and equipment rules."

The Examiner respectfully disagrees; Moyer clearly discloses service template 220 does not correspond to the claimed implementation rules and device template 222 does not correspond to both the claimed technology rules and equipment rules.

Applicant defines the claimed service/implementation rules; the services can be described in the form of service rules R.sub.S independently of the technology to be used and the specifics of the network equipment. The aspects related to the technology to be used and to those specifics can be modeled in the form of implementation rules (Spec; paragraph [0045]). Moyer clearly defines a service template as providing vendor-neutral end-to-end requirements (service/implementation rules) for enabling a particular service within a customer premise network. (Moyer; column 3 lines 60-62). Clearly these are equivalent because the service template describes the service independently of the technology to be used and the specifics of the network equipment just as the service/implementation rules do.

Applicant defines the claimed technology rules and equipment rules as technology rules are used to model expert know-how and automate its application (Spec; paragraph [0033]) and equipment rules are used to model how the technology rules must be adapted or selected for a particular equipment type (Spec; paragraph [0041]). Moyer clearly defines the device template as providing the capabilities of a particular device (equipment rules) and how to configure that

particular device (technology/equipment rules)(Moyer; column 3 lines 65-67, column 4 lines 1-5). Clearly these are equivalent because the device template describes capabilities of a particular device and how to configure that particular device (i.e. what the device is and how to use it) just as the technology/equipment rules do.

Moyer's service template clearly performs the function of Applicant's service/implementation rules and Moyer's device template clearly performs the function of Applicant's technology/equipment rules. They are, therefore, equivalent and that Moyer's service template 220 clearly does correspond to the claimed implementation rules and device template 222 clearly does correspond to both the claimed technology rules and equipment rules.

Applicant agues that Moyer does not teach or suggest that "the service template comprises device template."

The Examiner respectfully disagrees; Moyer clearly discloses the service template comprises device template (abstract, column 2 lines 23-46, column 3 lines 57-67, column 4 lines 1-4, column 5 lines 10-40). Moyer clearly discloses the service template use the device templates in order to implement the service therefore it is composed of them (i.e. without the device template the service template cannot function as disclosed). Moyer clearly discloses using the list of services, the service configuration validator accesses the service database 204 and obtains the corresponding service templates 220 (service rules). Next, the service configuration validator accesses the network configuration directory 208 and obtains the temporary vendor-neutral device-configuration settings for the currently requested service and the configuration settings for priorly enable services for network 100. Using this information, the service configuration validator verifies that all service requirements as specified by the service templates 220 (service) are true/met given the particular

configuration settings as specified by the device configuration settings obtained from the network configuration directory 208. Methods for performing validation of the configuration settings are described in Sanjai Narain's U.S. patent application Ser. No. 09/966,136, filed Sep. 28, 2001. The configuration generator will attempt to correct the configuration settings if it determines that the service requirements, as specified by the service templates (service rules), are not met.

Second, the service configuration validator verifies that the customer premise network can be configured for the requested service. Specifically, the service configuration validator accesses the customer premise network database 202 to determine the specific devices within the customer premise network 100 and accesses the device database 206 to obtain the device templates (technology/equipment rules) for these devices. Using this information and the generated vendor-neutral device-configuration settings, the service configuration validator verifies that the network devices can be configured for the requested service (Moyer; column 5 lines 10-40). Moyer clearly discloses that the service template requires the use of device templates for the list of devices needed to implement that service. It is clear from Moyer that the device templates are used, and required by, the service template in order to implement the service according to the service requirements.

Therefore, Moyer clearly discloses the service template comprises device template.

Applicant argues that "Moyer discloses that the device template provides the capabilities of a particular device and how to configure the particular device (column 3, line 67 to column 4, line 2). However, this does not teach or suggest that the device template (allegedly corresponding to equipment rules) are used to model how the device template (allegedly corresponding to the technology rules) must be selected for a particular equipment type. In fact, such a proposal would be illogical."

The Examiner respectfully disagrees; Moyer clearly teaches that the device template provides the capabilities of a particular device (equipment rules) and how to configure the particular device technology/equipment rules) as discussed above. Furthermore, a template by definition is anything that determines or serves as a pattern; a model (Dictionary.com; Random House, template, definition 2) and it is therefore, quite logical that a service/device template which serves as a pattern (such as by using rules, e.g. service requirements, a configuration, etc.) and a model be used for implementing a service on a network using various devices as taught by Moyer. Furthermore, Moyer clearly discloses specifically, the service configuration validator accesses the customer premise network database 202 to *determine the specific devices* within the customer premise network 100 and accesses the device database 206 *to obtain the device templates (technology/equipment rules) for these devices.* Using this information and the generated vendor-neutral device-configuration settings, the service configuration validator *verifies that the network devices can be configured for the requested service* (emphasis added)(Moyer; column 5 lines 32-40).

Moyer clearly discloses the system invokes an adaptor module that *translates the vendor-neutral device-configuration settings determined for the requested service to vendor-specific device-configuration settings and communicates these settings to the particular devices* within the customer premise network to enable the service. Similar to the above, the network configuration manager can also disable a service within the customer premise network (emphasis added)(Moyer; particularly lines 39-46).

Therefore, Moyer clearly discloses the device template provides the capabilities of a particular device (equipment rules) and how to configure the particular device technology/equipment rules) and that such a proposal is, in fact, quite logical. It is unclear to the Examiner how, exactly, Applicant proposes that Moyer is able to implement a service using various devices without having rules defining the service to be implemented and how to implement that

service or rules regarding the devices or how they must be configured in order to implement the service. Since Moyer clearly does teach implementing a service in a network using a service template (rules defining the service and how it must be configured) and device template (rules defining the equipment and how it must be configured) it is plainly apparent that such rules are required.

The Examiner emphasizes for the record that the claims employ broad language including the use of words and phrases such as "rules" (service, implementation, technology, and equipment) which have broad meanings in the art and have multiple embodiments and interpretations that extend well beyond the scope of the specification. In addition, the Applicant has not argued any narrower interpretation of the claim language, nor amended the claims significantly enough to construe a narrower meaning to the limitations. Since the claims breadth allows multiple interpretations and meanings, which are broader than Applicant's disclosure, the Examiner is required to interpret the claim limitations in terms of their broadest reasonable interpretations while determining patentability of the disclosed invention. See MPEP 2111. While the claims of issued patents are interpreted in light of the specification, prosecution history, prior art and other claims, this is not the mode of claim interpretation to be applied during examination. During examination, the claims must be interpreted as broadly as their terms reasonably allow (See *In re American Academy of Science Tech Center*, 367 F.3d 1359, 1369, 70 USPQ2d 1827, 1834 (Fed. Cir. 2004). The claims must also be given their broadest reasonable interpretation consistent with the specification and the interpretation that those skilled in the art would reach. Any term that is not clearly defined in the specification must be given its plain meaning as understood by one of ordinary skill in the art. See MPEP 2111.01. See also *In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989), *Sunrace Roots Enter. Co. v. SRAM Corp.*, 336 F.3d 1298, 1302, 67 USPQ2d 1438, 1441 (Fed. Cir. 2003), *Brookhill-Wilk 1, LLC v. Intuitive Surgical, Inc.*, 334 F.3d 1294, 1298 67 USPQ2d 1132, 1136

(Fed. Cir. 2003). The interpretation of the claims by their broadest reasonable interpretation reduces the possibility that, once the claims are issued, the claims are interpreted more broadly than justified. See *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969). Also, limitations appearing in the specification but not recited in the claim are not read into the claim. See *In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).*

Therefore, the failure to significantly narrow definition or scope of the claims and supply arguments commensurate in scope with the claims implies the Applicant intends broad interpretation be given to the claims. The Examiner has interpreted the claims in parallel to the Applicant in the response and reiterates the need for the Applicant to distinctly define the claimed invention.

Conclusion

The Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the Applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the Applicant, in preparing the responses, to fully consider each of the cited references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage disclosed by the Examiner.

With respect to any amendments to the claimed invention, it is respectfully requested that Applicant indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

If Applicant intends to make numerous amendments the Examiner respectfully requests that Applicant submit a clean copy of the claims in addition to the marked up copy of the claims in order to expedite the examination process.

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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- US 6,477,566 B1

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL C. MURRAY whose telephone number is 571-270-1773. The examiner can normally be reached on Monday - Friday 0800-1700 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tonia Dollinger can be reached on (571)-272-4170. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. C. M./
Examiner, Art Unit 2443

/Tonia LM Dollinger/

Supervisory Patent Examiner, Art Unit 2443